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taro had been cultivated on permanent flooded fields earlier than had rice. Another possibility would be that taro, together with the technique of irrigation, was introduced into Oceania later than were the yams and alocasia, and the Polynesians' more important fruit trees.

A folktale of the Bontocs in the mountains of northern Luzon furnishes us with another clue. According to Bontoc lore, their hero, Lumauig, taught them agriculture in a tiny irrigated garden, which is still tended from generation to generation by a special priest. The crop of this garden is taro and not rice.[15] This would seem to lend support not only to the thesis that the cultivation of root crops preceded that of grain but also to the thesis that terracing and irrigation were already being practiced by cultivators of root crops.

A beautiful example of sedentary cultivation with root crops as a staple has recently been discovered in the remote Grand Valley of the Balim River in the highlands of Netherlands New Guinea. On the valley floor of the Balim and its tributaries neolithic people practice intensive cultivation, including such techniques as the use of green and animal manure, deep tillage with stone adzes, the digging of ditches to improve the run-off and drainage of swampy land, and the construction of terraces.[16] On the slopes they practice shifting cultivation. In both their shifting and their sedentary agriculture the staple crop is the sweet potato, while taro is a secondary crop. Also subsidiary are bananas, sugar cane, and pandanus.

In most parts of Southeastern Asia, however, root crops have been replaced by such cereals as millet, Job's tears, upland and lowland rice,[17] and maize. There seem to be good reasons to believe that the first cereals cultivated in Southeastern Asia under the system of shifting cultivation were foxtail, also known as Italian millet (*Setaria italica* Beauv.), and Job's tears (*Coix lacryma-jobi* L.). Before their domestication these grasses, like the root crops and fruit trees of Southeastern Asia, had been used by alithic and palaeolithic hunting and gathering people. Shifting cultivators succeeded in domesticating these plants by selecting over the course of years the species most valuable to them. Although foxtail and Job's tears have largely been replaced by the more valuable grains, rice and maize, there are still shifting cultivators in India, Thailand, Indochina, Malaya, the Indies, and the Philippines who raise the former cereals. Burkill says of foxtail,

> Such a crop as this probably came into cultivation before man had settled enough to grow the better cereals. Its grain ripens in even as little as two months and a half from sowing, and the wandering tribes of the Malay forests are able to remain in one neighbourhood long enough to catch a crop: but the usual duration of the crop seems to be four months.[18]

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[15] Keesing and Keesing: Taming Philippine Headhunters, 1934, p. 56.

[16] Brass: "Stone Age Agriculture in New Guinea," 1941, pp. 555–569.

[17] Upland rice is also known as hill, mountain, dry-land, or dry, rice; lowland rice is also known as irrigated, wet-land, or wet, rice.

[18] Burkill: *op. cit.*, Vol. 2, p. 1999.